

10031028-1

1. (Currently Amended) A detector comprising:  
an amplifier, connected between the power supply and ground, including a current detector generating a current [first detected] signal, having an amplifier output;  
a voltage detector, interposing the amplifier output and ground, generating a voltage [second detected] signal;  
a matching circuit, connected to the amplifier output;  
a load, interposing the matching circuit and ground; [[and]]  
an analyzer, receiving the current and voltage [first and second detected] signals, generating an analyzer output that reflects a power parameter, including,  
a multiplication node, receiving one of the current and voltage signals,  
generating a scaled signal, and  
an arithmetic node, receiving the scaled signal and the other of the current  
and voltage signals, generating the output that reflects the power parameter; and  
a gain control receiving the analyzer output, electrically connected to the  
amplifier.
2. (Cancelled)
3. (Cancelled).
4. (Currently Amended) A detector, as defined in claim [[3]] 1, wherein the power parameter is total power.
5. (Currently Amended) A detector, as defined in claim [[3]] 1, wherein the power parameter is the amplitude of total power.
6. (Currently Amended) A detector, as defined in claim [[3]] 1, the analyzer comprising a multiplication node, receiving the <sup>current</sup> <sub>first</sub> <sup>voltage</sup> <sub>second</sub> detected signals, generating the output that reflects the power parameter.  
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7 -18. (Cancelled)